Feeder Bluff and Accretion Shoreform Mapping in Island County for Nearshore Habitat Restoration and Conservation

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This project definitively mapped feeder bluffs (sediment sources for littoral drift systems) and accretion shoreforms (accretion beaches with backshore areas) along the entire shore of Whidbey and Camano Islands. The project was initiated by the Island County MRC with SRF and Ecology funding for salmon recovery. The primary data source used was new field reconnaissance along the entire 212 miles of shore by small boat at higher tides with shore landings as needed. A total of 770 units were mapped at an accuracy of 1:24,000 scale. Mapping defines current conditions and historic research was limited to accretion shoreforms where segment ends were obscured by development. The length of units varied between 27 to 23,280 ft. Accretion shoreforms were most frequent unit mapped by aggregate length, followed by feeder bluff. Transport zone, modified, and feeder bluff exceptional occurred less frequently. Mapping is available for GIS-based analysis such as the role of feeder bluffs or degree of loss of sediment sources. Summary statistics and example sites and results will be presented. Recommendations for nearshore restoration and conservation were field mapped based on the presence of old unnecessary modifications and impeded tidal flow into estuaries/lagoons. backshore areas, or pristine conditions. Example sites will be presented.